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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/029,570 | 12/20/2001 | Michael V. Chobotov | 24641-1110 | 4976 |
| 7590 | 11/19/2003 | | EXAMINER | |
| Townsend and Townsend and Crew LLP Two Embarcadero Center San Francisco, CA 94111 | | | DAVIS, ROBERT B | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1722 | |

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|-----------------|-----------------|
| | 10/029,570 | CHOBOTOV ET AL. |
| Examiner | Art Unit | |
| Robert B. Davis | 1722 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

Disposition of Claims

4) Claim(s) 1-78 is/are pending in the application.
4a) Of the above claim(s) 29-78 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-12, 14-26 and 28 is/are rejected.
7) Claim(s) 13 and 27 is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10 . 6) Other: _____ .

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

The related application section contains two blank spaces.

Appropriate correction is required.

Election/Restrictions

2. Applicant's election without traverse of Group I, claims 1-28, in Paper No. 9 is acknowledged.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 3, 5, 7, 14-17, 19, 21, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Titterton et al (2,983,961: figures 1-3; column 2, lines 53-56 and column 4, lines 26-30).

Titterton et al teaches a mold for making a corrugated pipe comprising: opposed mold sections (10, 12) having a helical cavity (68) in the inner mold surface and flared cuff sections at each end of the mold at tapered surface (58). The mold also has a vent (62). For the purposes of examination, the mold of the claims has been interpreted as a mold for blow molding a pipe wherein the mold has a cylindrical main cavity with

additional channel in the surface of the cavity. The fact that the molded article is used as a graft is intended use and does not affect the structure of the claims.

4. Claims 1-3 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Martino et al (4,049,762: figures 4, 5 and 14.

Martino et al teach a mold having mold sections (120, 122) having a cylindrical cavity with cuff forming portions (136) and channel cavities (176, 178).

5. Claims 1-4, 7, 8, 12, 15-18, 21, 22 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Imaeda et al (6,523,576: figures 3, 8, 9, 10 and column 6, lines 28-59).

Imaeda et al teach a blow mold for forming a corrugated pipe comprising: molds (54, 55) having a channel with longitudinal channels (55a) and circumferential channels (54a) wherein the channels are in fluid communication with each other. The molds also have discharge passages (54b, 55b) on the surfaces of the channels (54a, 54b).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of Titterton et al, Imaeda et al or Martino et al taken together with Lupke et al (4,319,872: figure 6 and column 7, lines 3-6).

Titterton et al, Imaeda et al and Martino et al disclose all claimed features except for the mold being made of a sintered metal.

Lupke et al discloses a corrugating blow mold comprising mold blocks (16) made of sintered metal.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of anyone of Titterton et al, Imaeda et al or Martino et al by using sintered metal mold as disclosed by Lupke et al for the purpose of allowing entrapped gas from the troughs to escape and prevent the formation of surface defects in the molded article.

9. Claims 9 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of Titterton et al, Imaeda et al or Martino et al taken together with Mennig (Mold-Making Handbook, pages 252, 253).

Titterton et al, Imaeda et al and Martino et al disclose all claimed features except for the mold being made of a sintered metal.

Mennig discloses the use of aluminum as a blow mold making material, which has the desired properties of high thermal conductivity, low weight, high hardness and good machinability.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the apparatus of anyone of Titterton et al, Imaeda et al or Martino et al by using aluminum as the mold making material as disclosed by Mennig because of the well known desired properties outlined above.

10. Claims 10, 11, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of Titterton et al, Imaeda et al or Martino et al.

Each of Titterton et al, Imaeda et al or Martino et al disclose all claimed features except for the main cavity having a length of from 50-300 mm and an inner transverse dimension of from 4-50 mm; however, it would have been obvious at the time of the invention to one of ordinary skill in the art to modify each of the references by choosing dimensions within the ranges as claimed depending upon the desired final use of each of the molded pipe segments as applicant has not stated criticality of these ranges.

Allowable Subject Matter

11. Claim 13 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record teach or suggest a mold as claimed in claims 2 or 16, wherein the mold has a plurality of channel cavities configured as circumferential

channel cavities and at least one helical channel in fluid communication with the circumferential cavities.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining references show various pipe molding references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Davis whose telephone number is 703-308-2625. In December, the examiner's number will change to 571-272-1129. The examiner can normally be reached on Monday-Friday 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Robert B. Davis
Primary Examiner
Art Unit 1722

11/17/03